

A-30

MIDI KEYBOARD CONTROLLER

SERVICE NOTES

First Edition

TABLE OF CONTENTS

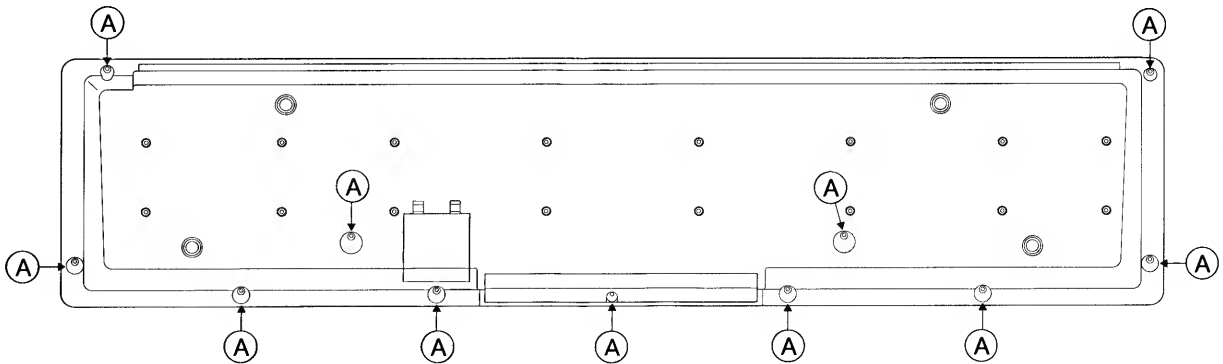
TABLE OF CONTENTS	目次	Page
SPECIFICATIONS	仕様.....	1
DISASSEMBLY	分解手順.....	1
LOCATION OF CONTROLS	パネル配置図.....	2
EXPLODED VIEW 1	分解図 1	3
EXPLODED VIEW 2	分解図 2	4
KEYBOARD PARTS LIST	鍵盤パーツリスト.....	4
KEYBOARD DISASSEMBLY	鍵盤分解図.....	4
PARTS LIST	パーツリスト.....	5
BLOCK DIAGRAM	ブロック図.....	6
RESTORING THE FACTORY PRESETS	ファクトリー・プリセットのロード方法.....	6
POWER SUPPLY PCB ASSY	POWER SUPPLY PCB ASSY	7
CPU PCB ASSY (or CPU BOARD)	CPU PCB ASSY (or CPU BOARD).....	7, 8
CONTROLS PCB ASSY	CONTROLS PCB ASSY	9
(or CONTROLS BOARD)	(or CONTROLS BOARD)	
LEFT CONTACT PCB ASSY w/RUBBER	LEFT CONTACT PCB ASSY w/RUBBER	10, 11
(or CONTACT BOARD SX)	(or CONTACT BOARD SX)	
RIGHT CONTACT PCB ASSY w/RUBBER	RIGHT CONTACT PCB ASSY w/RUBBER	10, 11
(or CONTACT BOARD)	(or CONTACT BOARD)	

SPECIFICATIONS/仕様

◎KEYBOARD	76 weighted key dynamic keyboard
◎SOUND SOURCE	Completely compatible with Roland GS format.
◎USER PATCHES	32
◎CURRENT DRAW	80mA(DC 9V)
◎BATTERY LIFE	Approx. 25 hours(used alkaline battery type x 6 pcs)
◎DIMENSIONS	1195(W) x 270(D) x 105(H) mm 47-3/64(W) x 10-5/8(D) x 4-9/64(H) inches.
◎WHIGHTS	8.1 kg/ 17 lb 13 oz.
◎ACCESSORIES	Alkaline Battery MN1500 Duracell x 6 pcs NOTE: The below parts is supported as replacement instead of above parts. 注：上記の部品は、供給しません。 補修用部品としては、下記の部品が供給されます。 Alkaline Battery SUM-3S :PNo.12569105 MIDI Cable 1m (Black) :PNo.23485228 Owner's Manual :PNo.K6018122 (English/French/Germany/Italy/Japanese)
◎OPTIONS	AC Adaptor ACA-100 (100V) ACA-120 (117V) ACA-220 (230V) ACA-240A (240VA) ACA-240E (240VE)

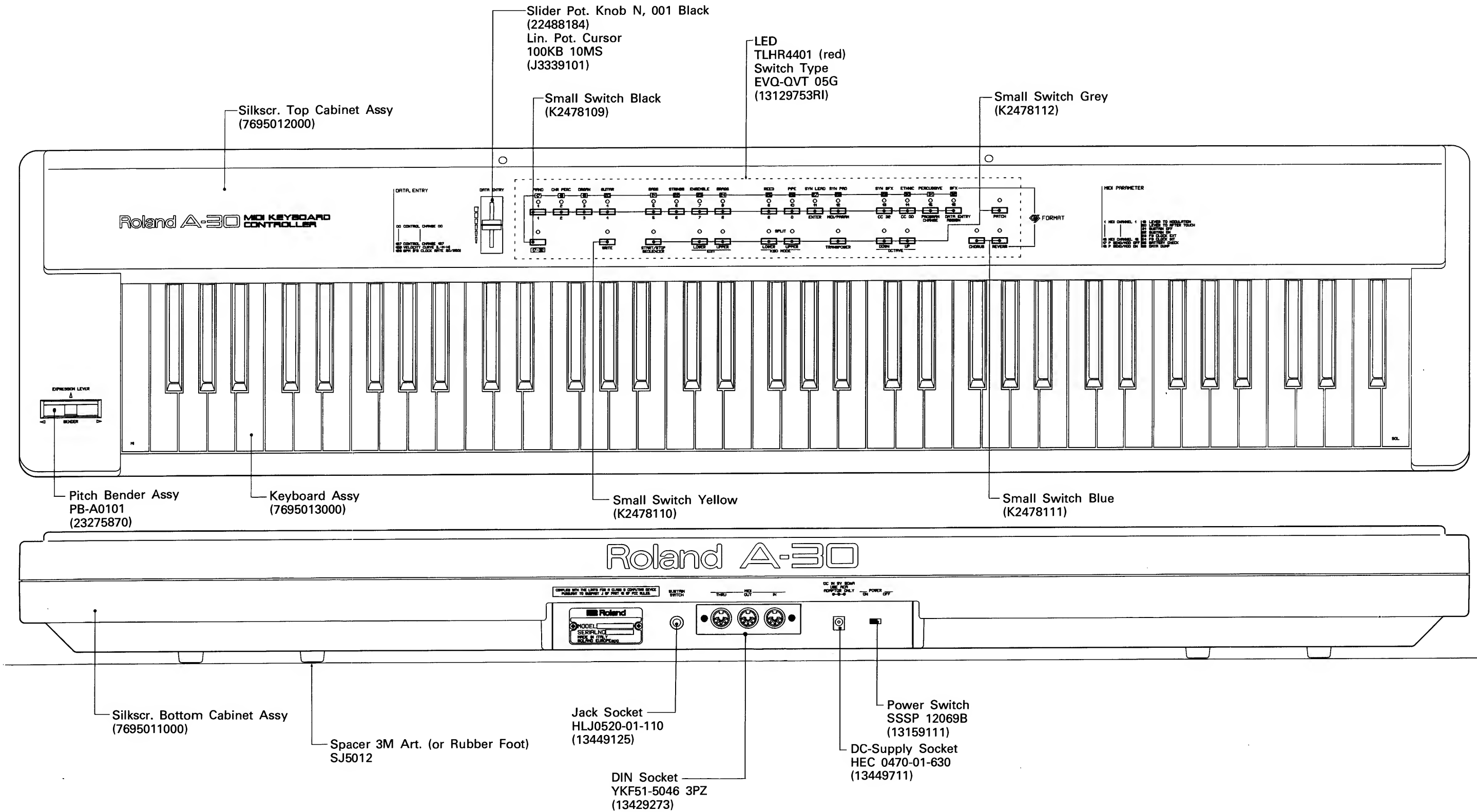


DISASSEMBLY/分解手順

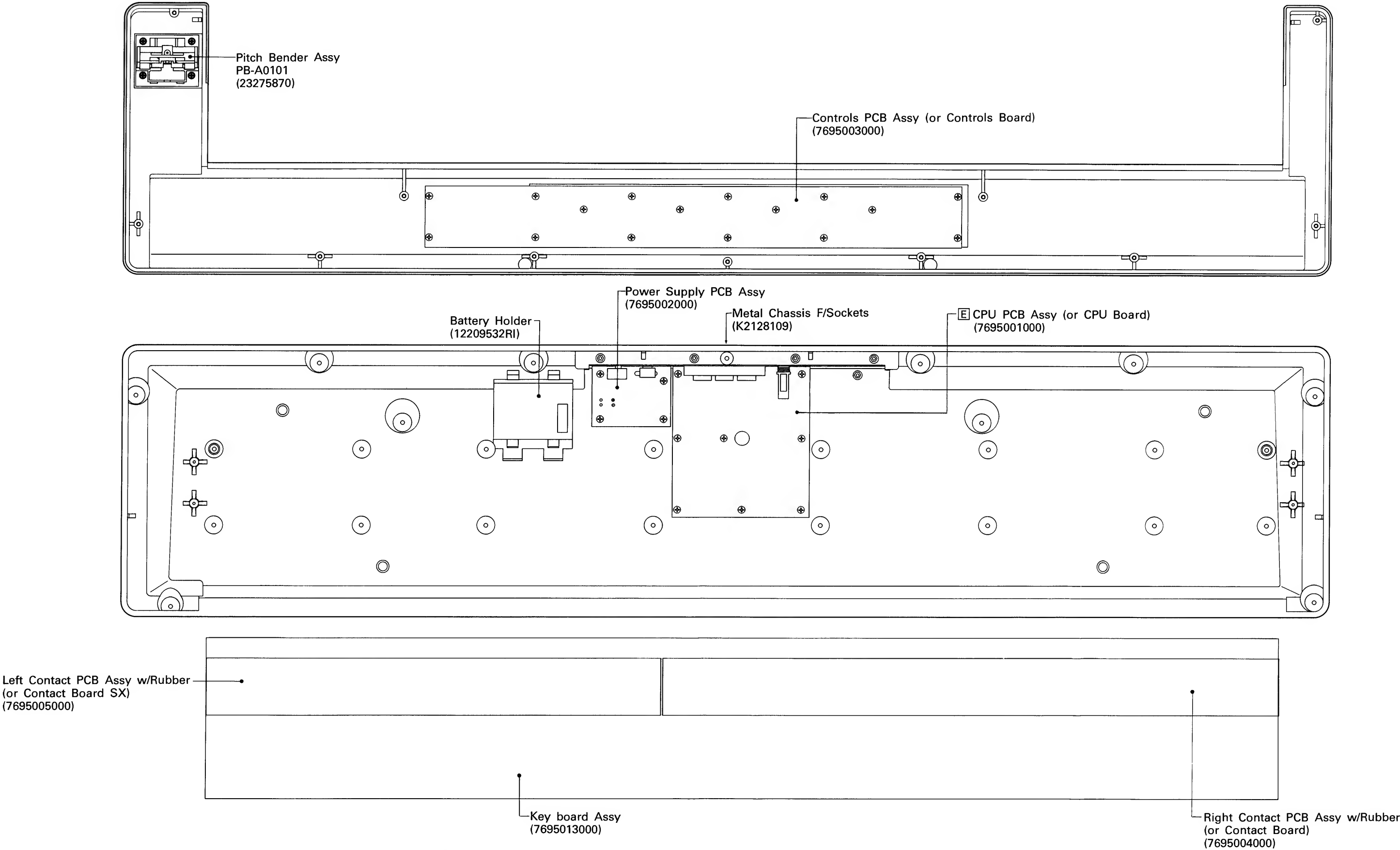


Silksr Bottom Cablnet Assy removal screw ㉞ x 11 pcs
㉞: 3.5 x 19 mm Self tap. screw TCTCPRBZ.

LOCATION OF CONTROLS/パネル配置図

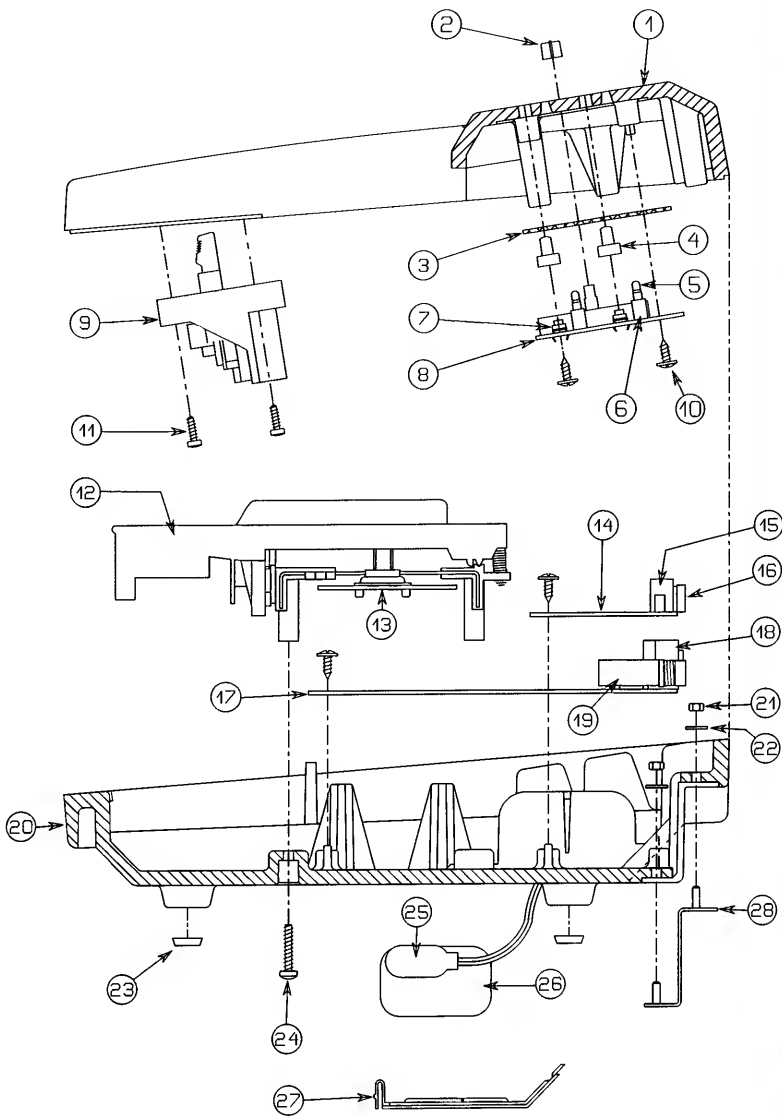


EXPLODED VIEW 1/分解図 1



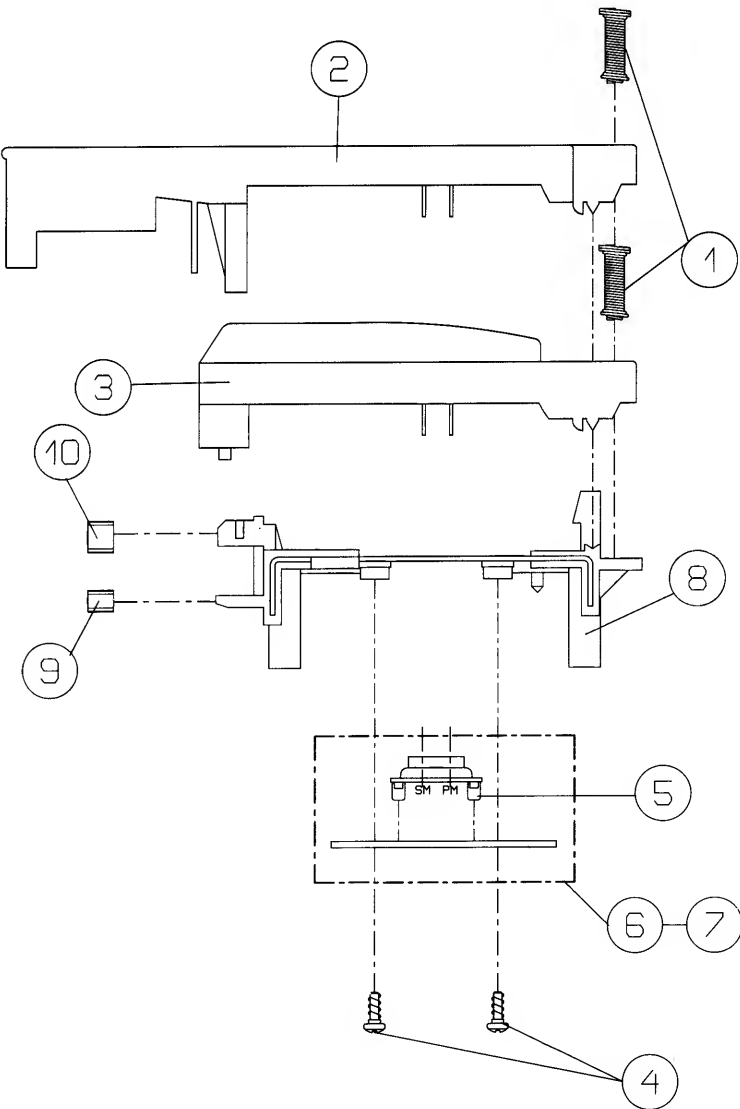
EXPLODED VIEW 2/分解図 2

NO.	PARTS NUMBER	PARTS NAME
①	7695012000	Silksr. Top Cabinet Assy
②	22488184	Slider Pot. Knob N,001 black
③	K2268108	Vibration Damping Form F/Cover
④	K2478109	Small Switch black
	K2478110	Small Switch yellow
	K2478111	Small Switch blue
	K2478112	Small Switch grey
⑤	15029248RI	LED (red) TLHR4401
⑥	K2168101	Spacer H.11.5
⑦	13129753RI	Switch Type EVQ-QVT05G
⑧	7695003000	Controls PCB Assy (or Controls Board)
⑨	23275870	Pitch Bender Assy PB-A0101
⑩	*****	3.5 x 9.5mm Special Screw PR T.8 (Screw No. J2289115 or 250990009)
⑪	*****	2.9 x 8mm Self Tap. Screw TCTCPRBZ (Screw No. J2289104 or 206132908)
⑫	7695013000	Keyboard Assy 76keys (weight)
⑬	7695004000	Right Contact PCB Assy w/Rubber (or Contact Board)
	7695005000	Left Contact PCB Assy w/Rubber (or Contact Board Sx)
⑭	7695002000	Power Supply PCB Assy
⑮	13429823RI	Power Socket Block
⑯	13449711	DC-Supply Socket HEC0470-01-630
⑰	E 7695001000	CPU PCB Assy (or CPU Board)
⑱	13429273	DIN Socket YKF51-5046 3PZ
⑲	13449125	Jack Socket HLJ0520-01-110
⑳	7695011000	Silksr. Bottom Cabinet Assy
㉑	*****	MA3 Nut H.3 (Screw No. J2289113 or 260133003)
㉒	*****	Flat Washer I/D 4 (Screw No. J2139101 or 270990001)
㉓	J2359101	Spacer 3M Art. SJ5012 (or Rubber Foot)
㉔	*****	3.5 x 19mm Self Tap. Screw TCTCPRBZ (Screw No. J2289106 or 206133519)
㉕	13419723RI	Battery Connection
㉖	12209532RI	Battery Holder
㉗	7695014000	Varnished Battery Cover
㉘	K2128109	Metal Chassis F/Sockets



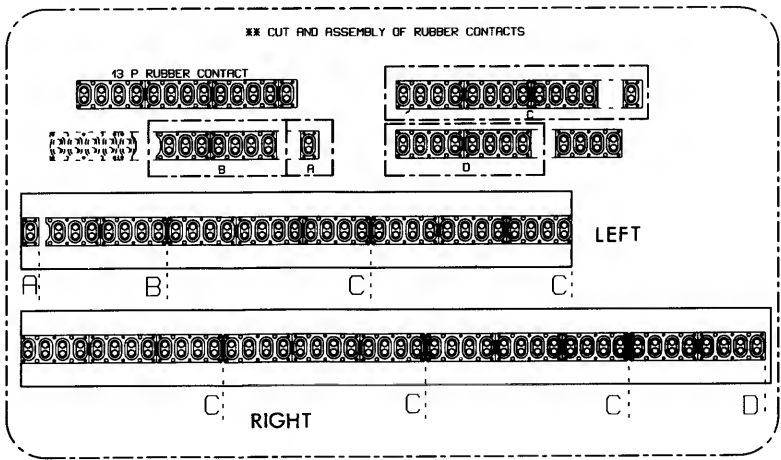
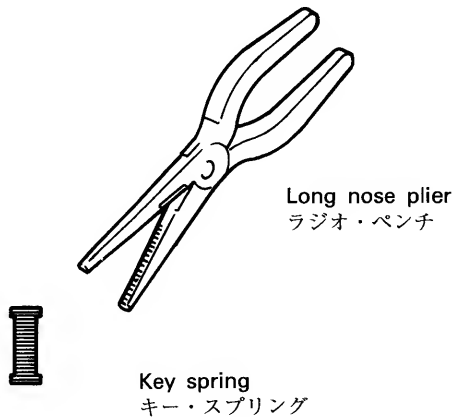
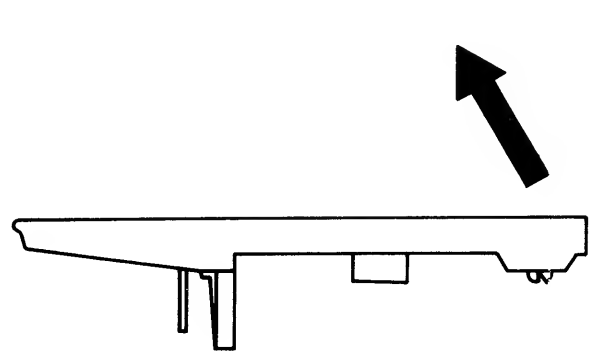
KEYBOARD PARTS LIST/鍵盤パーツリスト

NO.	PARTS NUMBER	PARTS NAME
①	J2179101	KEY SPRING gr63
②	J2579112	NATURAK KEY C5 (gr10) (DO) (weight)
	J2579113	NATURAL KEY D6 (gr10) (RE) (weight)
	J2579114	NATURAL KEY E7 (gr10) (MI) (weight)
	J2579115	NATURAL KEY F1 (gr10) (FA) (weight)
	J2579116	NATURAL KEY G2 (gr10) (SOL) (weight)
	J2579117	NATURAL KEY A3 (gr10) (LA) (weight)
	J2579118	NATURAL KEY B4 (gr10) (SI) (weight)
	J2579119	NATURAL KEY C8 (gr10) (MI (1)) (weight)
	J2579121	NATURAL KEY G (gr10) (SOL (F)) (weight)
	J2599120	SHARP KEY (gr10) (weight)
③	*****	2.9 x 8mm SELF TAP.SCREW TCTCPRBZ (SCREW NO. J2289104 or 206132908)
④	J3169101	RUBBER CONTACT 13P
⑤	7695005000	LEFT CONTACT PCB ASSY w/RUBBER (or CONTACT BOARD SX)
⑥	7695004000	RIGHT CONTACT PCB ASSY w/RUBBER (or CONTACT BOARD)
⑦	J2589101	PLASTIC CHASSIS
⑧	J2359104	GUIDE BUSHING INFERIOR
⑨	22158789	GUIDE BUSHING SUPERIOR



KEYBOARD DISASSEMBLY/鍵盤分解手順

1. Remove the key spring from key to be removed.
 2. Remove the key by lifting one end of the key as shown below.
1. キー・スプリングをはずす。
 2. キーの後ろ側を上方へ引っ張りながら取り外す。



PARTS LIST/パーツリスト

SAFETY PRECAUTIONS:

The parts marked △ have safety-related characteristics. Use only listed parts for replacement.

安全上の注意：

△が付いている部品は、安全上特別な規格でつくられたものです。

交換の際は、指定された部品番号以外の部品は使わないようにして下さい。

CONSIDERATIONS ON PARTS ORDERING

When ordering any parts listed in the parts list, please specify the following items in the order sheet.

	QTY	PART NUMBER	DESCRIPTION	MODEL NUMBER
Ex.	10	22575241	Sharp Key	C-20/50
	15	2247017300	Knob (orange)	DAC-15D

Failure to completely fill the above items with correct number and description will result in delayed or even undelivered replacement.

パーツ発注に関するお願い

オーダーシートには、必ず下記の4項目は正確に記入して下さい。(例外は除く)

	必要数	パーツナンバー	品名	使用機種
例)	10	22575241	Sharp Key	C-20/50
	15	2247017300	Knob (orange)	DAC-15D

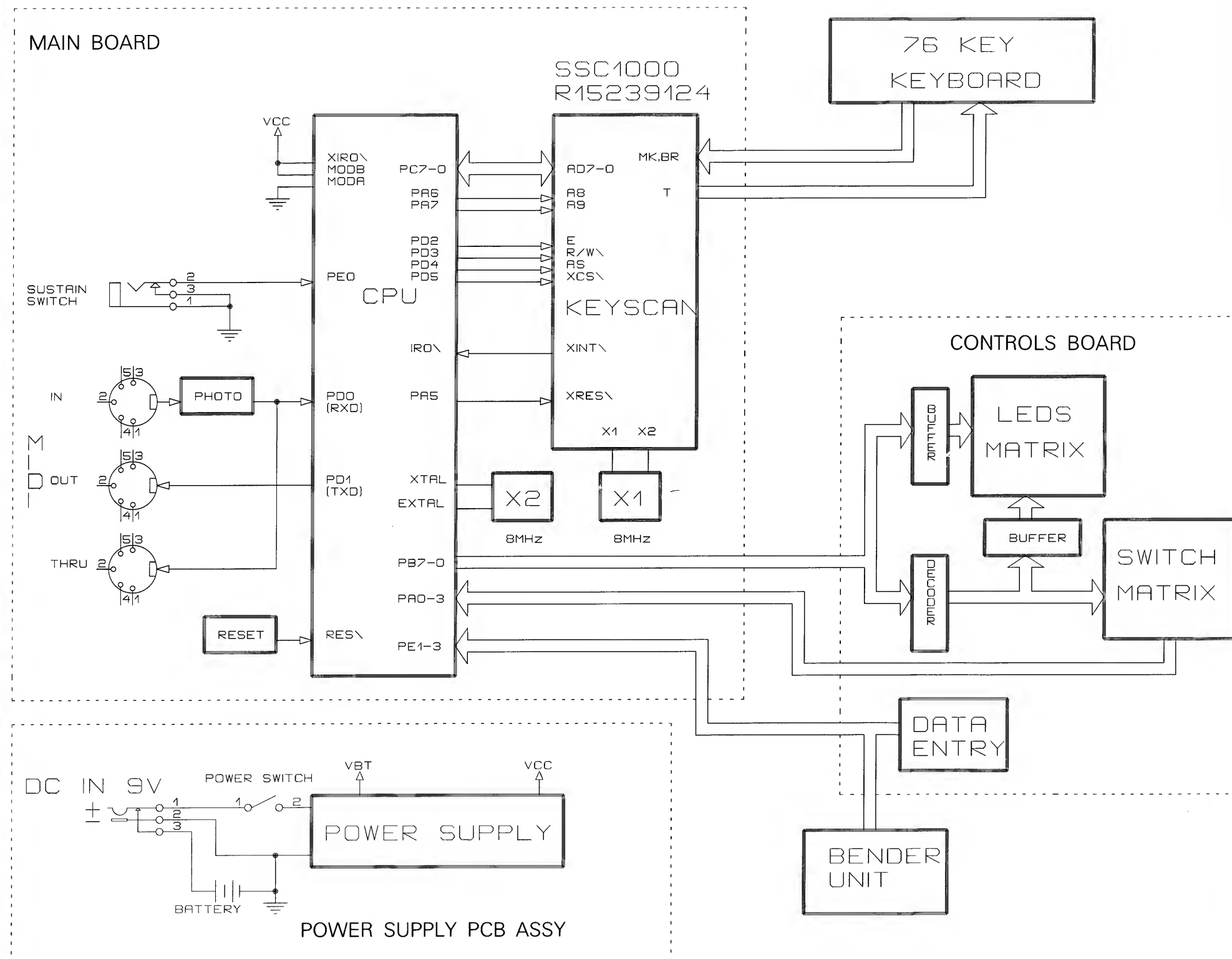
もし記入漏れ、誤記等がある場合、必要部品が発送出来なかったり、大幅な遅れの原因になります。御協力をお願いします。

CASING／ケース			
7695011000	SILKSCR. BOTTOM CABINET ASSY		
7695012000	SILKSCR. TOP CABINET ASSY		
7695014000	VARNISHED BATTERY COVER		
J2359101	SPACER 3M ART. SJ5012 (or RUBBER FOOT)		
CHASSIS／シャーシ			
K2638114	RIGHT POLYST. END SIDE		
K2638115	LEFT POLYST. END SIDE		
K2128109	METAL CHASSIS F/SOCKETS		
KNOB, BUTTON／ツマミ, ボタン			
22488184	SLIDER POT. KNOB N, 001 BLACK		
K2478109	SMALL SWITCH	BLACK	
K2478110	SMALL SWITCH	YELLOW	
K2478111	SMALL SWITCH	BLUE	
K2478112	SMALL SWITCH	GREY	
SWITCH／スイッチ			
13129753RI	EVQ-QVT05G	SWITCH TYPE	
13159111	SSSP12069B	POWER SWITCH	
JACK, SOCKET／ジャック, ソケット			
13449711	HEC0470-01-630	DC-SUPPLY SOCKET	
13449125	HLJ0520-01-110	JACK SOCKET	
13429273	YKF51-5046 3PZ	DIN SOCKET	
BENDER UNIT／ベンダー・ユニット			
23275870	PB-A0101	PITCH BENDER ASSY	
NOTE: Replacements Pitch Bender Assy should be made on a unit bassis. No replacements available for individual parts. Replacement only by a unit.			
注：Pitch Bender Assy の交換は、ユニット単位で行って下さい。 補修品は、ユニット単位。			
KEYBOARD／鍵盤完成品			
7695013000	KEYBOARD ASSY		
NOTE: See "A30 KEYBOARD PARTS LIST" (P. 4) for details.			
注：詳細は，“A30 KEYBOARD PARTS LIST”（P. 4）を参照して下さい。			
PCB ASSY／基板完成品			
<input checked="" type="checkbox"/> 7695001000	CPU PCB ASSY (or CPU BOARD)		
7695003000	CONTROLS PCB ASSY (or CONTROLS BOARD)		
7695002000	POWER SUPPLY PCB ASSY		
IC			
K5258101	ZC400431CFU	MASK CPU	IC4 on CPU
15239124	SSC1000	GATE ARRAY (KEY SCAN.)	IC5 on CPU
15169550T0	74HC138	3 TO 8 DEMULTIPLEXER	IC3 on CONTROL
15169334H0	74LS05P	HEX O. C. INVERTER	IC2 on CPU
15219183	M51953AL	RESET IC	IC1 on CPU
15199559RI	TD62506P	LEDS BUFFER	IC1 on CONTROL
15199560RI	TD62305AP	LEDS BUFFER	IC2 on CONTROL
15229718	6N137	PHOTO-COUPLER	IC3 on CPU
TRANSISTOR／トランジスター			
15119155RI	BC/560-B		
J5119101	BD371C		
15119154RI	BC/549-B		

DIODE／ダイオード			
15019158RI	IN-4001		
15019159RI	1N-414B		
15029284RI	TLHR4401	LED (red)	
15019345RI	BZX79C5V6	ZENER 5.6V	
RESISTOR／抵抗			
13910103	S. L. 8X10K +C	RESISTOR ARRAY	
13919253RI	RGLD8X153J 15KX8	RESISTOR ARRAY	
POTENTIOMETER／ボリューム			
J3339101	100KB 10MS	LIN. POT. CURSOR	
CAPACITOR／コンデンサー			
13519452	DD306-959-F104Z25	CERAM. COND.	
13529179RI	100K 20%	MULTILAYER CER. COND.	
13649668RI	47UF/ 25V	ELECTRL. COND. -H	
13639179RI	100UF/ 25V	ELECTRL. COND. -V	
13639169S0	47UF/ 25V	ELECTRL. COND. -V	
13639206S0	10UF/ 50V	ELECTRL. COND. -V	
13639255RI	1UF/100V	ELECTRL. COND. -V	
INDUCTOR, COIL, FILTER／インダクタ, コイル, フィルター			
12449382RI	PLT1-R53C	NOISE SUP.	
12449370	SBT-0160W	NOISE SUP.	
12449326	SBT-0460	NOISE SUP.	
13529187	ELKTT391CA	NOISE SUP.	
12449380	EXC-ELDR25V	NOISE SUP.	
CRYSTAL, RESONATOR／クリスタル, 発振子			
15299112RI	8MHz	CERAMIC RESONATOR	
CONNECTOR／コネクタ			
13419677RI	AMP C/1.27	(16P)	FAMALE CONN.
13369689RI	AMP C/1.27	(20P)	FEMALE CONN.
23275870	CONNECTOR	(6P)	MALE
WIRING, CABLE／ワイヤリング, ケーブル			
7695008000	CABLE ASSY	(28)	w (16PC-16PC)
7695009000	CABLE ASSY	(14)	w (20PC-20PC)
7695010000	CABLE ASSY	(42)	w (20PC-20PC)
SCREW／ネジ類			
*****	2.2 x 6mm SELF TAP. SCREW TCTC (SCREW No. J2289122 or 201132206)		
*****	2.9 x 6mm SELF TAP. SCREW TCTC (SCREW No. J2289101 or 201132906)		
*****	2.9 x 8mm SELF TAP.SCREW TCTCPRBZ (SCREW No. J2289104 or 206132908)		
*****	3.5 x 19mm SELF TAP. SCREW TCTCPRBZ (SCREW No. J2289106 or 206133519)		
*****	3.5 x 9.5mm SPECIAL SCREW PR T.8 (SCREW No. J2289115 or 250990009)		
*****	MA3 NUT H.3 (SCREW No. J2289113 or 260133003)		
*****	FLAT WASHER I/D 4 (SCREW No. J2139101 or 270990001)		
MISCELLANEOUS／その他			
K2168101	SPACER H. 11. 5		
13419723RI	BATTERY CONNECTION		
12209532RI	BATTERY HOLDER		
13429823RI	POWER SOCKET BLOCK		
K2268108	VIBRATION DAMPING FORM F/COVER		
ACCESSORIES／標準付属品			
*****	MN1500 DURACELL	BATTERY	
NOTE: The below parts is supported as replacement instead of above parts.			
注：上記の部品は、供給しません。 補修用部品としては、下記の部品が供給されます。			
23485228	12569105 Battery	SUM-3S	
K6018122	MIDI CABLE 1M (BLACK)		
	OWNER'S MANUAL (ENGLISH/FRENCH/GERMANY/ITALY/JAPANESE)		
OPTIONS／別売品			
*****	ACA-100	AC Adaptor (100V)	
*****	ACA-120	AC Adaptor (117V)	
*****	ACA-220	AC Adaptor (230V)	
*****	ACA-240A	AC Adaptor (240VA)	
*****	ACA-240E	AC Adaptor (240VE)	

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

BLOCK DIAGRAM/ブロック図



RESTORING THE FACTORY PRESETS

/ファクトリー・プリセットのロード方法

1. Switch on your instrument, keeping the [WRITE] pressed.
2. All 32 Factory patched will be restored into your musical device.
The restoring procedure requires 30 seconds approximately.
3. During the restoring procedure, the LEDs on the panel will blink until the operation is over.

1. [WRITE] を押しながら電源をオンして下さい。
2. 32のすべてのファクトリー・プリセットがロードされます。
3. ロード中、パネル上のLEDは動作が終了するまで点滅します。
ロードは完了までおよそ30秒かかります。

POWER SUPPLY PCB ASS'Y

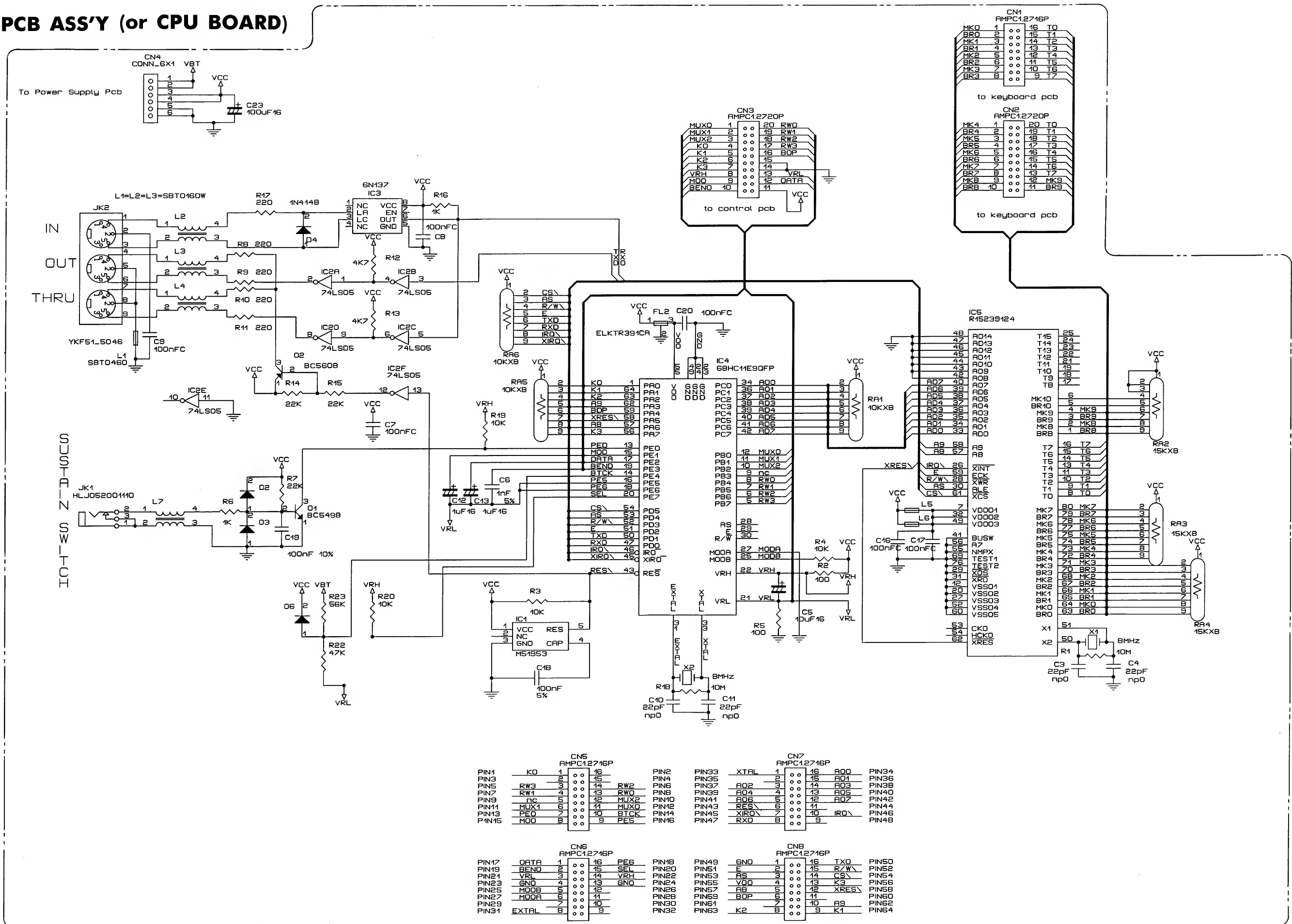
ASSY 7695002000

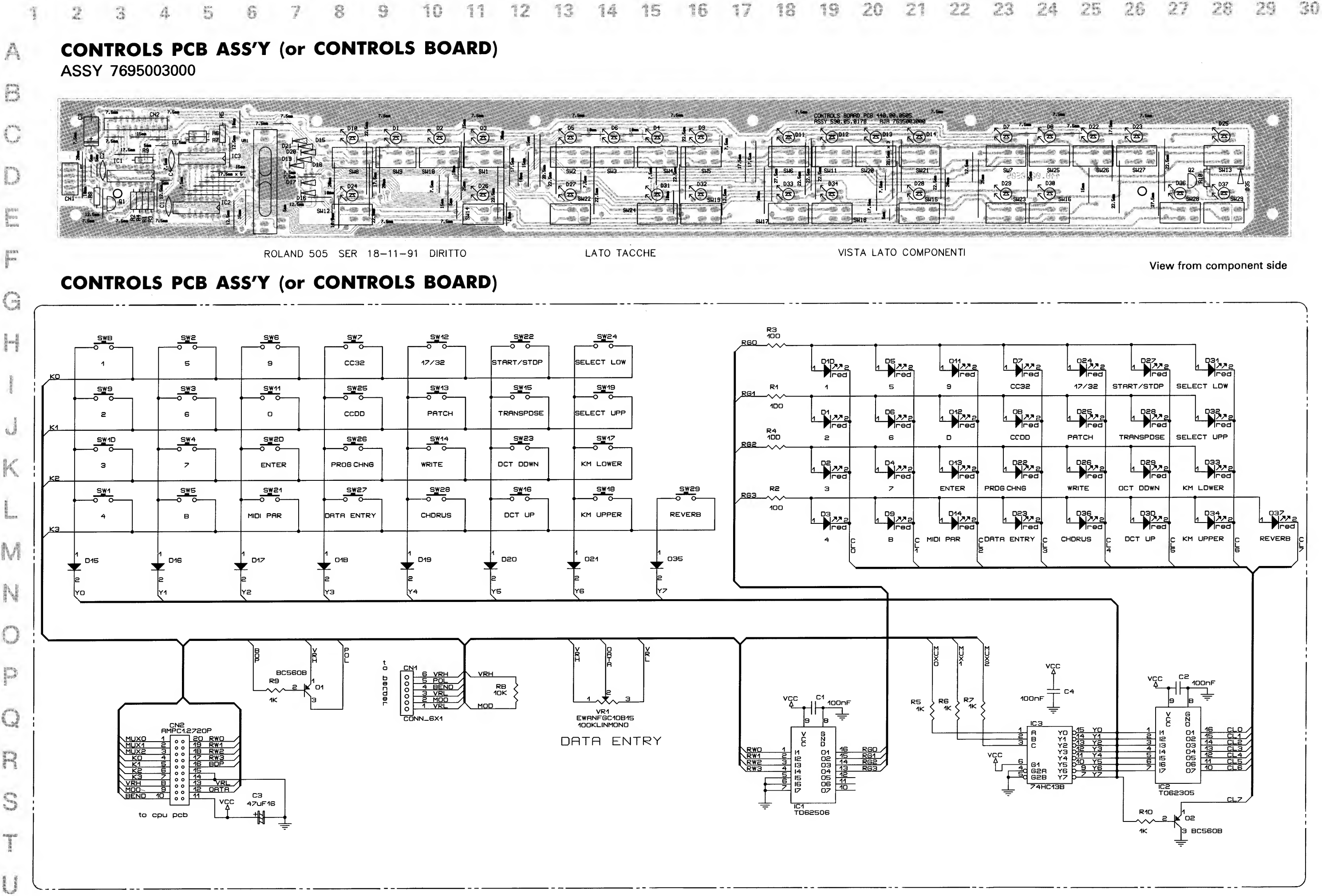
View from component side

E CPU PCB ASS'Y (or CPU BOARD)

ASSY 7695001000

CPU PCB ASS'Y (or CPU BOARD)

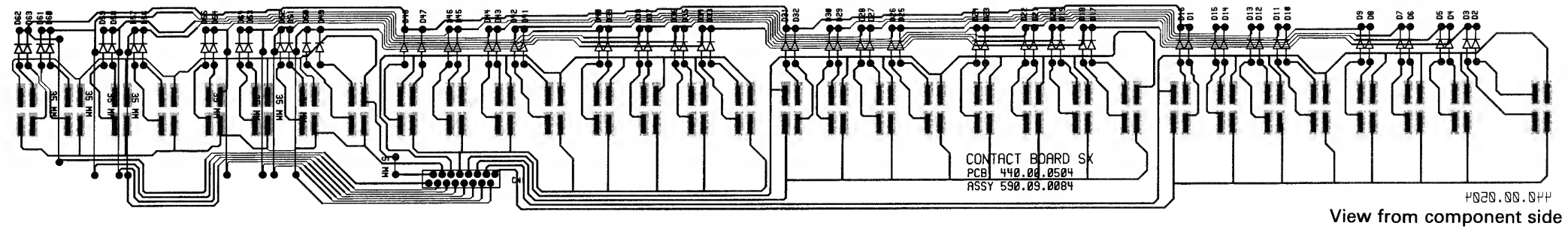




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LEFT CONTACT PCB ASS'Y w/RUBBER
(or CONTACT BOARD SX)
 ASSY 7695005000



**RIGHT CONTACT PCB ASS'Y w/RUBBER
(or CONTACT BOARD)**
ASSY 7695004000

